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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,530	04/07/2005	Makoto Inoue	MAT-8679US	6754
23122 D.A.TNIED DD.E	7590 09/06/2007		EXAMINER	
RATNERPRESTIA P O BOX 980 VALLEY FORGE, PA 19482-0980			LAMBERT, JOHN W	
			ART UNIT	PAPER NUMBER
		•	2609	
			MAIL DATE	DELIVERY MODE
			09/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/530,530	INOUE ET AL.
Office Action Summary	Examiner	Art Unit
·	John Lambert	2609
The MAILING DATE of this communication Period for Reply	appears on the cover sheet w	ith the correspondence address
A SHORTENED STATUTORY PERIOD FOR REWHICHEVER IS LONGER, FROM THE MAILING Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory per Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the may earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNI R 1.136(a). In no event, however, may a iod will apply and will expire SIX (6) MOI atute, cause the application to become A	CATION. reply be timely filed NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on <u>0</u>	7 April 2005.	
2a) ☐ This action is FINAL . 2b) ☑ T	his action is non-final.	
3) Since this application is in condition for allow	wance except for formal mat	ters, prosecution as to the merits is
closed in accordance with the practice unde	er <i>Ex parte Quayle</i> , 1935 C.[D. 11, 453 O.G. 213.
Disposition of Claims	٠.	•
4) ☐ Claim(s) 1-7 is/are pending in the application 4a) Of the above claim(s) is/are without 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-7 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	Irawn from consideration.	
Application Papers		
9) ☐ The specification is objected to by the Exam 10) ☑ The drawing(s) filed on <u>07 April 2005</u> is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the corrupt of the oath or declaration is objected to by the	a)⊠ accepted or b)⊡ obje the drawing(s) be held in abeya rection is required if the drawing	nce. See 37 CFR 1.85(a). g(s) is objected to: See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the papplication from the International Bure * See the attached detailed Office action for a least term.	ents have been received ents have been received in A riority documents have been eau (PCT Rule 17.2(a))	Application No received in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892)	4) \text{Interview }	Summary (PTO-413)
Notice of References Cited (PTO-932) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 04/07/2005.	Paper No(s)/Mail Date nformal Patent Application

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-5, and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Watarai et al (U.S. Patent No. 6,831,547).

Regarding claim 1, Watarai et al teaches a vehicle remote control apparatus comprising:

a first transmitter (vehicle exterior transmitter col. 4, line 55) for outputting an authentication request signal (see col. 4, lines 54-55) to a mobile device (portable transceiver col. 2 line 12), the mobile device including a radio terminal assigned with an identification code special to a vehicle and outputting an authentication response signal (reply data col. 2, lines 26-27) corresponding to the identification code (see col. 2, lines 49-52 in which the portable transceiver is by definition a "radio terminal" that sends and receives signals, communicates with a "vehicle receiver" which is part of the vehicle, making the shared "reply data" special to that particular vehicle);

a second transmitter (vehicle interior transmitter col. 3, line 32) for outputting an interference wave (prohibition signal col. 3, line 33) canceling the authentication request

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signal at the same time as the first transmitter transmits the authentication request signal (col. 3, lines 30-34 teach the interference signal being sent by a second transmitter during the transmission of the request signal, and in col. 3, lines 34-42, the cancellation of this request signal by the prohibition signal is taught resulting in no reply from the mobile device);

a receiver for receiving the authentication response signal output from the mobile device in response to the authentication request signal (col.2, line 13), thereby checking authenticity of the authentication response signal (see again col. 2, lines 49-52, where if the mobile device transmits data to the receiver in response to a request signal from the transmitter, thereby causing output from the vehicle receiver that effects a response in the door lock mechanism as in col. 2, lines 20-24, then authenticity has been checked);

and a controller for controlling operation of an on vehicle equipment unit (door lock means col.2, line 22) based on a result of authentication of the authentication response signal (col. 2, lines 20-25).

3. As for claim 2, Watarai et al teaches an interference wave that sets limits to a communicatable range between the first transmitter and the mobile device. From col.2. lines 33-44, the vehicle exterior transmitters transmit a prohibition signal at a low output level on both the left and right sides of the vehicle so that the mobile device must be within a certain range to receive it, thus effectively setting up the range limits described.

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4. For claim 3, Watarai et al teaches that the first transmitter and the second transmitter exchange their functions when the receiver does not receive an authentication response signal for a predetermined period of time (col. 7, lines 66-67, through col. 8, lines 1-6). As seen in FIG.1, the transmitters 2L and 2R are the vehicle exterior transmitters and the transmitter 3 is the vehicle interior transmitter previously identified with the first transmitter and second transmitter, respectively. In the citation, these transmitters are exchanging functions after a predetermined period of time. While it is not stated explicitly that the receiver has not received an authentication response signal during this period of time, it is inherent, since if an authentication response signal (reply data) had been received, meaning that the mobile device has sent the reply data,

the program would come to an end as seen in FIG.3 and the exchange would not occur.

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5. As recited in claim 4, Watarai et al teaches the vehicle remote control apparatus according to claim 1, wherein the on-vehicle equipment unit is a door of the vehicle and the controller controls a lock of the door. The on-vehicle equipment is a door of the vehicle because the mechanism that unlocks the door is integral to the door (col. 2, lines 14-18), while the controller that controls the mechanism is mounted in the vehicle (lines 20-22).

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6. Regarding claim 5, Watarai et al teaches the controller releasing the lock of the door (as discussed previously in col. 2, lines 20-22) when the authentication of the authentication response signal is validated (also previously discussed, see col. 2, lines 20-24 and lines 49-52).

7. Claim 7 is claiming a system comprised of the apparatus discussed in claims 1-5; therefore, claim 7 is rejected for the same reasons as set forth in claims 1-5 above.

Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watarai et al (U.S. Patent No. 6,831,547) in view of Masakado (JP 06269065).

For claim 6, Watarai et al teaches a vehicle remote control apparatus according to claim 1, but does not teach the use of a burst wave as the interference wave explicitly. Masakado, however, does teach the use of a burst wave in a wireless communication system for security purposes (see Abstract). It is obvious, therefore, that at the time of the invention, one of ordinary skill in the art could have used a burst

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wave in the system of Watarai et al to obtain the same predictable results as those of the invention.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kondou et al (JP 63010832) teaches a remote control signal receiver using burst waves.

11. Any response to this office action should be faxed to (571) 273-8300 or mailed to:

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Hand – delivered responses should be brought to:

Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22314

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Lambert whose telephone number is (571) 270-3521. The examiner can normally be reached on Monday - Thursday 8:00AM - 5:00PM EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benny Tieu can be reached on (571) 272-7490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John Lambert Examiner Art Unit 2609 August 2, 2007

BENNY Q. TIEU SPE/TRAINER

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